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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Anders Stokki

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EXAMINER

NGUYEN, KHANH TUAN

ART UNIT

PAPER NUMBER

1796

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/596,261	Applicant(s) STOKKI ET AL.	
	Examiner KHANH T. NGUYEN	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE filed on 06/04/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12, 15-21 and 23-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12, 15-21 and 23-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>none</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/04/2008 has been entered.

Response to Amendment

2. The amendment filed on 06/04/2008 is entered and acknowledged by the Examiner. Claims 12, 15-21 and 23-26 are currently pending in the instant application. Claims 1-11, 13-14 and 22 have been canceled.

Withdrawn Objection/Rejection

3. The objected of claim 21 due to following informalities is withdrawn in view of Applicant's amendment.

The rejection of claims 12-13, 15-18, and 23-24 under 35 U.S.C. 102(b) as being anticipated by Hari et al. (U.S Pat. 5,516,546) is withdrawn in view of Applicant's amendment and/or cancellation.

The rejection of claims 14 and 22 under 35 U.S.C. 103(a) as being unpatentable over Hari et al. (U.S Pat. 5,516,546) is rendered moot in view of the instant cancellation.

The rejection of claims 19-21 under 35 U.S.C. 103(a) as being unpatentable over Hari et al. (U.S Pat. 5,516,546) in view of Wienand et al. (U.S Pat. 4,101,689) is withdrawn in view of Applicant's amendment.

The rejection of claims 12, 13, 15, 16, 17, 20 and 23 under 35 U.S.C. 103(a) as being unpatentable over either Heckel et al. (U.S Pat. 4,670,075) or Szerreiks et al. (U.S Pat. 6,831,023) in view of Kojimoto (Machine English Translated JP Pub. 58-042670 hereinafter, "Kojimoto") is withdrawn in view of Applicant's amendment and/or cancellation.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 12, 15-18, 20 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hari et al. (U.S. Pat. 5,516,546 hereinafter, "Hari") in view of Kojimoto (JP 62-291362). The English translation of JP 62-291362 will be used as the English equivalent.

With respect to claims 12 and 25, Hari teaches a conductive floor coating comprising of a substrate (3, 4, and non-label strip) and a conductive coating 5 (Fig. 3). At column 8 lines 32-57, Hari teaches a conductive lacquer layer consisting of a binder with or without solvent and conductive filler. The said conductive lacquer layer is position beneath, thus is considered to be a substrate, and the conductive coating composition is applied to the said lacquer in a thickness of 0.2-5 mm (i.e. 200-5000 μm). Hari further teaches the said conductive coating composition comprising of a binder such as epoxides, polyurethanes, polyesters or a mixture thereof (Col. 2, lines 9-11 and Col. 4, lines 22-33). Polyurethane is known in the a art as a transparent material. In order to provide conductivity, Hari suggest adding conductive filler such as carbon black, graphite or surface-treated metal powder to the coating (Col. 2, lines 11-13). Hari further teaches the metal fillers are likely used together with graphite (Col. 6, lines 37-39). Hari teaches the said conductive filler preferably having a particle size ranging from 20-1000 μm (Abstract). The lower limit of 20 μm overlaps with the claimed mean size of 0.1- 50 μm . Hari also teaches the conductive filler particles is presented in an amount of 10-40% by weight of graphite, 5-30% weight of carbon fiber, or 1-10% weight finely divided metal particles (Col. 2, line 63 to Col. 3, line 8). The weight percent of

conductive filler disclosed by Hari either lies within the claimed range of 0.01-10% by weight or overlaps with the instant claimed range.

The differences between the instant application and Hari disclosure is that Hari is silent with respect to a conductive filler being a substantially spherical glass particles with a conductive coating comprising of silver, aluminum, copper, nickel, gold, or alloy thereof with another metal.

In an analogous art, Kojimoto teaches an electrically conductive floor composition for dissipating static electricity build up by spreading electric build up to the base surface (i.e. substrate) (Last Paragraph, Page 3). The said electrically conductive floor composition comprises a conductive filler such as carbon black or graphite can be substituted with silver glass beads to improve decorative value (Please see last paragraph of page 3 to first paragraph of page 4.) and provide outstanding electrical conductivity and self-leveling properties (Second Paragraph, Page 5) wherein a smooth finishing of the floor surface is easily obtained (Page 7). Kojimoto also teaches the said silver glass beads may be incorporated into the composition at 10-50% by weight (Page 7). The lower limit of Kojimoto silver bead weight percentage is within the upper limit of the claimed range. The silver glass bead of Kojimoto is considered to be readable on the substantially spherical glass particle with a conductive coating comprising of silver. Kojimoto further teaches the electrically conductive material is dispersed evenly within the floor surface (i.e. floor top coat) and the said conductive filler cannot be recognized by the naked eye (Page 8). The electrically conductive floor composition of Kojimoto also comprises a binder selected from epoxy resin, polyurethane resin, unsaturated

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polyester resin, acrylic resin and their modified products (First Paragraph, Page 6). In other words, Kojimoto teaches a composition containing transparent binder such as polyurethane dispersed therein with silver glass beads that cannot be seen by the naked eye, thus give the surface coating composition a transparent appearance.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the conductive floor coating composition of Hari by substituting the carbon black or graphite filler of Hari having a particle size of 20-1000 μm with a silver glass bead of Kojimoto within the particle size range of Hari in order to improve decorative value of the floor and provide outstanding electrical conductivity and self-leveling properties to the coating wherein a smooth finishing of the floor surface is easily obtained as suggested by Kojimoto. The burden is upon the applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594.

Regarding claim 15, Kojimoto teaches a silver glass bead (Page 4). The court has held that structurally similar compound (i.e. the silver glass bead of Kojimoto) is generally expected to have similar properties (dry bulk resistivity ranging from 0.0001 and 0.01 Ohms/cm). *In re Gvurik*, 596 F. 2d 1012, 201 USPQ 552.

Regarding claims 16, 17, and 23, Hari teaches a polyurethane and methacrylate resin (i.e. an epoxy acrylate) (Col. 2, lines 9-13 and Col. 3, lines 39-50).

Regarding claims 18 and 24, Hari teaches the sum of the conductive fillers is less than 50% by weight (Col. 5, lines 45-50), which means that when floor coating is dried and the solvents have been evaporated the dry content of binders mixture such as epoxy(methyl)acrylate and polyurethane resin (Col. 4, lines 22-33) and may be greater than 50% by weight.

Regarding claim 20, Hari teaches a conductive substrate (i.e. conductive lacquer layer) (Col. 8 lines, 32-35). Kojimoto teaches the static electricity build up is dissipated in base surface (Last Paragraph, Page 3).

6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hari (U.S. Pat. 5,516,546) in view of Kojimoto (JP 62-291362) as applied to the above claims, and further in view of either Glotfelter et al. (U.S. Pat. 4,101,689 hereinafter, "Glotfelter") or Kim et al. (U.S. Pub. 2005/0227104 A1 hereinafter, "Kim").

Hari and Kojimoto are relied upon as set forth above. Hari teaches a method of for obtaining a thin coating of less than 5 mm to 0.2 mm, i.e., less than 5000 μm to 200 μm (Col. 4, lines 37-40 and Col. 8, lines 53-57). However, Hari and Kojimoto did not disclose a top coating having a thickness between 0.5 to 100 μm .

Glotfelter generally teaches a transparent polymer/glass coating composition (top coating) which provides stain and gloss protection to a flooring substrate (Col. 1, lines 10-15; Col. 2, lines 42-44; and Col. 7, lines 20-30) may be coated at a thickness of 1-2 microns (Col. 7, lines 15-18).

Kim also teaches a top coating (i.e. top painting layer) may be applied onto a flooring substrate at a thickness of 10 to 20 μm by using a roll coater [0051].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to coat the flooring substrate with the conductive floor coating composition of Hari in view of Kojimoto at a thickness within the claimed range of 0.5 to 100 μm because Glotfelter teaches the motivation to providing stain and gloss protection to a flooring substrate at said thickness and Kim teaches a method of coating the flooring substrate with a roll coater to obtain said thickness.

7. Claims 21 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hari (U.S. Pat. 5,516,546) in view of Kojimoto (JP 62-291362) as applied to the above claims, and further in view of Wienand et al. (U.S. Pat. 4,101,689 hereinafter, "Wienand").

Hari and Kojimoto are relied upon as set forth above.

With respect to instant claim 21, Hari and Kojimoto did not disclose a polyvinyl chloride (PVC) substrate.

In an analogous art, Wienand teaches a polyvinyl chloride resin sheet 8 (i.e. PVC substrate) coated with a conductive composition 3 (Col. 2, lines 47-63) that may be applied to both sides of a substrate (Col. 2, lines 8-13). Hari teaches a ground conductor strip 3 position between the binder resin substrate 4 (Fig. 3). The grounded conductor strip 3 of Hari is considered to be a vertical conductive channel.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the binder resin substrate 4 material of Hari with a PVC resin material as suggested by Wienand and further incorporating a grounded conductor strip 3 of Hari to dissipate the electric static build up on the surface.

Regarding claim 26, Hari and Kojimoto did not disclose a polyvinyl chloride (PVC) substrate and about 1% by weight of the top coating of substantially spherical silver plated glass particle having a mean size of 10 μm .

Wienand teaches the conductive composition containing a carbon black particle with a particle size of 20 to 30 millimicrons, i.e., 0.02 to 0.03 μm (Col. 3, lines 43-46). Wienand teaches the use of a nano size conductive filler within a narrow particle distribution of 0.02 to 0.03 μm .

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the nano size carbon black of Wienand for the silver glass bead of Hari in view of Kojimoto while maintaining a narrow particle distribution as suggested by Wienand to provide a transparent composition with a conductive filler that cannot be seen by the naked eye and form a smooth surface with self-leveling property. If a transparent composition containing a large amount of conductive filler having a mean size of 10 μm is dispersed therein, it will most likely to be recognized by the naked eye. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to minimize the amount of macron size conductive filler, namely mean size of 10 μm . One having an ordinary skill in the art can arrive at the

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optimum amount (1% by weight) of macron size conductive filler through routine experimentation for best results. In addition, one having an ordinary skill in the art can easily substitute the binder resin substrate material of Hari with a PVC resin material as suggested by Wienand because a PVC resin substrate is expressly suggest by Wienand disclosure.

Response to Arguments

8. Applicant's arguments with respect to claims 12, 15-21 and 23-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHANH T. NGUYEN whose telephone number is (571)272-8082. The examiner can normally be reached on Monday-Friday 8:00-5:00 EST PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KTN/
07/11/2008

/DOUGLAS MC GINTY/

Primary Examiner, Art Unit 1796